```
     (FILE 'HOME' ENTERED AT 17:47:47 ON 24 JUN 2004)

     FILE 'USPATFULL' ENTERED AT 17:47:58 ON 24 JUN 2004
L1            478 S TERPINEOL/CLM
L2              8 S L1 AND TOPICAL/CLM
L3              0 S TERPINEOL/AB AND TOPICAL/AB
L4             61 S TERPINEOL/AB
L5              1 S L4 AND TOPICAL/CLM

     FILE 'CAPLUS, USPATFULL' ENTERED AT 17:52:23 ON 24 JUN 2004
L6             34 FILE CAPLUS
L7             79 FILE USPATFULL
     TOTAL FOR ALL FILES
L8            113 S TERPENEOL OR TERPENIOL
L9          19481 FILE CAPLUS
L10          1610 FILE USPATFULL
     TOTAL FOR ALL FILES
L11         21091 S TERPENEOL OR TERPENIOL OR TERPENOID
L12            27 FILE CAPLUS
L13            68 FILE USPATFULL
     TOTAL FOR ALL FILES
L14            95 S L11 AND (RETONOIC OR RETINOID)
L15             5 FILE CAPLUS
L16            42 FILE USPATFULL
     TOTAL FOR ALL FILES
L17            47 S L11 AND (RETONOIC OR RETINOID) AND TOPICAL

     FILE 'REGISTRY' ENTERED AT 17:59:13 ON 24 JUN 2004
L18             0 S TERPENIOL/CN
L19             0 S TERPENEOL/CN
L20             1 S TERPINEOL/CN
L21             0 S TERPENEOL/CN
L22             1 S TERPENEOL
L23             3 S TERPENE ALCOHOL
                  SAVE ALL L10079416/L

     FILE 'USPATFULL, CAPLUS' ENTERED AT 18:18:09 ON 24 JUN 2004

     FILE 'CAPLUS' ENTERED AT 18:29:19 ON 24 JUN 2004
L24          9599 S TERPINEOL
L25            38 S L24 AND (TOPICAL AND SKIN)
L26            13 S L25 AND TREAT?
L27            15 S TERPINEOL AND CYTOCHROME

     FILE 'MEDLINE, SCISEARCH, EMBASE, CAPLUS' ENTERED AT 18:51:42 ON 24 JUN
     2004
L28             0 FILE MEDLINE
L29             0 FILE SCISEARCH
L30             0 FILE EMBASE
L31             1 FILE CAPLUS
     TOTAL FOR ALL FILES
L32             1 S TERPINEOL AND (P450 1A)
L33             0 FILE MEDLINE
L34             0 FILE SCISEARCH
L35             0 FILE EMBASE
L36             1 FILE CAPLUS
     TOTAL FOR ALL FILES
L37             1 S TERPINEOL AND (P450 (3A) 1A)
L38           218 FILE MEDLINE
L39           293 FILE SCISEARCH
L40           452 FILE EMBASE
L41           205 FILE CAPLUS
     TOTAL FOR ALL FILES
L42          1168 S (P450 (3A) 1A)
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L43          208 FILE MEDLINE
L44          292 FILE SCISEARCH
L45          448 FILE EMBASE
L46          711 FILE CAPLUS
     TOTAL FOR ALL FILES
L47         1659 S (CYTOCHROME (5A) 1A)
L48            2 FILE MEDLINE
L49            0 FILE SCISEARCH
L50            1 FILE EMBASE
L51            2 FILE CAPLUS
     TOTAL FOR ALL FILES
L52            5 S L47 AND (TERPENOID OR TERPINEOL OR TERPEN?)

     FILE 'STNGUIDE' ENTERED AT 18:58:25 ON 24 JUN 2004
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L27 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

AB . . . days with β-ionone i.p. or mixed with the diet increased the activities of biphenyl 4-hydroxylase, glucuronyl transferase, 4-nitrobenzoate reductase, and **cytochrome** P-450 in the 10,000 + g supernatants of liver homogenates by 50-70% and hexobarbitone sleeping times were decreased by 50%. Similar treatment with limonine, borneol, citral, and **terpineol** increased enzyme and **cytochrome** P-450 levels by 25%. Linalool, nerolidol, and squalene produced no increase in the activities of biphenyl 4-hydroxylase, glucuronyl transferase, or **cytochrome** P-450, but increased the activity of 4-nitrobenzoate reductase by 25-50%. The induction produced by β-ionone was maximal after a single. . .

IT 9035-51-2, **Cytochromes** P 450
(in liver, effect of dietary anutrient and terpenoids on)

AN 1969:436926 CAPLUS

DN 71:36926

=>

L27 ANSWER 13 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN
TI Biotransformations of α- **terpineol** in the rat: its effects on the liver microsomal **cytochrome** P-450 system
AB The metabolism of α- **terpineol** (I) was studied in rats by extracting the metabolites from the urine of I-treated rats and analyzing them by gas. . .
ST **terpineol** metab liver enzyme
IT Microsome
(drug-metabolizing enzymes of liver, **terpineol** administration effect on)
IT Liver, composition
(drug-metabolizing enzymes of microsomes of, **terpineol** administration effect on)
IT Enzymes
RL: BIOL (Biological study)
(drug-metabolizing, of liver microsomes, **terpineol** metabolism in relation to)
IT 5027-76-9, Oleuropeic acid 58506-22-2 91006-79-0
RL: BIOL (Biological study)
(as **terpineol** metabolite, in urine, liver microsome drug-metabolizing enzymes in relation to)
IT 98-55-5D, α- **Terpineol**, metabolites
RL: FORM (Formation, nonpreparative)
(formation of, liver microsome drug-metabolizing enzymes in relation to)
IT 98-55-5, α- **Terpineol**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(metabolism of, liver microsome drug-metabolizing enzymes response to)
IT 9023-03-4, NADP-**cytochrome** c reductase 9035-39-6, **Cytochrome** b5 9035-51-2, **Cytochrome** P 450, biological studies
RL: BIOL (Biological study)
(of liver microsomes, **terpineol** metabolism in relation to)
AN 1988:468374 CAPLUS
DN 109:68374

L27 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN
TI Characterization of a P-450 system which catalyzes the oxidation of **terpineol**
AB The importance of **cytochromes** P 450 in intermediary metabolism has led to the purification and sequence determination of more than 150 different enzymes, although. . . protein structure-function relationships of P-450s, the authors have isolated a novel, soluble P 450 system from an organism which metabolizes α- **terpineol** as a sole carbon source, cloned and sequenced the operon which encodes this P 450 system, and analyzed the proteins. . .
ST **cytochrome** P450 **terpineol** oxidn Pseudomonas gene
IT Pseudomonas
(**cytochrome** P 450 system for oxidation of α- **terpineol** in, biochem. and genetic characterization of)
IT Gene, microbial
RL: BIOL (Biological study)
(for **cytochrome** P 450 for α- **terpineol** oxidation in Pseudomonas species)
IT Operon
(for **cytochrome** P 450 system, for α- **terpineol** oxidation in Pseudomonas species)
IT 98-55-5, α- **Terpineol**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with **cytochrome** P 450 system of Pseudomonas species)
IT 9035-51-2, **Cytochrome** P450, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(terp, **terpineol** oxidation by, of Pseudomonas species)
AN 1994:100206 CAPLUS
DN 120:100206

L27 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

TI Evidence for the involvement of **cytochrome** P-450-dependent monooxygenases in the allylic hydroxylation of **terpineols** by Nicotiana tabacum cell cultures

AB A microsomal preparation isolated from suspension cells of Nicotiana tabacum was able to catalyze the hydroxylation of **terpineols** and their acetates at the allylic positions. The hydroxylase activities depended strictly on the presence of NADPH as the reducing cofactor and on O2 as the O donor. The hydroxylases were inhibited by **cytochrome** P 450 enzyme inhibitors, such as CO, metyrapone, and miconazole. Thus, it was established that these hydroxylases are **cytochrome** P 450-dependent monooxygenases.

ST **terpineol** metab **cytochrome** P450 monooxygenase tobacco

IT Tobacco
(involvement of **cytochrome** P 450-dependent monooxygenases in the allylic hydroxylation of **terpineols** by tobacco cell cultures)

IT 53-57-6, NADPH 58-68-4, NADH 146-14-5, FAD 146-17-8, FMN
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(cofactor dependence of **cytochrome** P 450-dependent monooxygenases in the allylic hydroxylation of **terpineols** by tobacco cell cultures)

IT 7782-44-7, Oxygen, biological studies
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(**cytochrome** P 450-dependent monooxygenases in the allylic hydroxylation of **terpineols** by tobacco cell cultures in relation to)

IT 9038-14-6, Monooxygenase
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(**cytochrome** P 450-dependent; involvement of **cytochrome** P 450-dependent monooxygenases in the allylic hydroxylation of **terpineols** by tobacco cell cultures)

IT 7785-54-8 10198-23-9, β-Terpinyl acetate 10235-63-9, γ-Terpinyl acetate 58206-95-4
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(involvement of **cytochrome** P 450-dependent monooxygenases in the allylic hydroxylation of **terpineols** and terpinyl acetates by tobacco cell cultures)

IT 22472-54-4 83921-03-3 83921-04-4 88437-32-5
RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)
(involvement of **cytochrome** P 450-dependent monooxygenases in the allylic hydroxylation of **terpineols** and terpinyl acetates by tobacco cell cultures)

IT 138-87-4, β- **Terpineol** 586-81-2, γ- **Terpineol** 7785-53-7 10482-56-1
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(involvement of **cytochrome** P 450-dependent monooxygenases in the allylic hydroxylation of **terpineols** by tobacco cell cultures)

IT 772-36-1 19894-91-8 22549-60-6 71697-84-2 83921-02-2 160424-44-2
RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)
(involvement of **cytochrome** P 450-dependent monooxygenases in the allylic hydroxylation of **terpineols** by tobacco cell cultures)

AN 1995:199345 CAPLUS
DN 122:76721

L52 ANSWER 3 OF 5 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

AN 2001116662 EMBASE

TI Effects of a water-soluble extract of rosemary and its purified component rosmarinic acid on xenobiotic-metabolizing enzymes in rat liver.

AU Debersac P.; Vernevaut M.-F.; Amiot M.-J.; Suschetet M.; Siess M.-H.

CS P. Debersac, U. Mixte Rech. Toxicol. Alimentaire, Inst. Natl. la Rech. Agronom.-Ecole, Natl. Sup. Biol. Appl. Nut./Aliment., 17 rue Sully, 21065 Dijon Cedex, France. debersac@dijon.inra.fr

SO Food and Chemical Toxicology, (2001) 39/2 (109-117).
Refs: 40
ISSN: 0278-6915 CODEN: FCTOD7

PUI S 0278-6915(00)00117-4

CY United Kingdom

DT Journal; Article

FS 029 Clinical Biochemistry
052 Toxicology

LA English

SL English

AB The effects of a water-soluble extract (WSE) of rosemary and its purified antioxidant rosmarinic acid (RA) on xenobiotic metabolizing enzymes (XME) were studied in rat liver after dietary administration. The modulation of phase I enzymes such as **cytochrome** P450 (CYP) **1A**, 2B, 2E1, 3A, and phase II enzymes such as glutathione S-transferase (GST), quinone reductase (QR) and UDP-glucuronosyltransferase (UGT) was evaluated by measuring enzyme activities with specific substrates. Protein levels of CYPs and rGST A1/A2, A3/A5, M1, M2 and P1 were measured using antibodies in Western blots. Caffeic acid was also studied because it results from RA biotransformation in rat after oral administration. Male SPF Wistar rats received the different compounds at 0.5% (w/w) incorporated into their diet for 2 weeks. WSE, containing RA, flavones and monoterpenes enhanced CYP 1A1, 2B1/2, 2E1 and GST (especially rGST A3/A5, M1 and M2), QR and UGT. On the contrary, no modification of XME was observed in response to RA or CA (except for a slight increase of UGT activity after CA treatment). The induction of XME by WSE could be attributed to flavones, monoterpenes or an additive effect of all components. .COPYRGT. 2001 Elsevier Science Ltd.

CT Medical Descriptors:
liver
enzyme activity
biotransformation
diet supplementation
enzyme induction
enzyme modification
chemical structure
liver weight
food composition
drug effect
xenobiotic metabolism
nonhuman
male
rat
animal experiment
controlled study
animal tissue
article
Drug Descriptors:
*Rosmarinus officinalis extract: TO, drug toxicity
*rosmarinic acid: TO, drug toxicity
*drug metabolizing enzyme: EC, endogenous compound
antioxidant: TO, drug toxicity
cytochrome P450 3A: EC, endogenous compound
cytochrome P450 1A1: EC, endogenous compound

cytochrome P450 2B1: EC, endogenous compound
cytochrome P450 2E1: EC, endogenous compound
glutathione transferase: EC, endogenous compound
reduced nicotinamide adenine dinucleotide (phosphate) dehydrogenase (quinone): EC, endogenous compound
glucuronosyltransferase: EC, endogenous compound
caffeic acid
flavone derivative
terpene
unclassified drug

RN (rosmarinic acid) 20283-92-5; (glutathione transferase) 50812-37-8; (reduced nicotinamide adenine dinucleotide (phosphate) dehydrogenase (quinone)) 9032-20-6; (glucuronosyltransferase) 37329-64-9, 9030-08-4; (caffeic acid) 27323-69-9, 331-39-5

L52 ANSWER 2 OF 5 MEDLINE on STN
AN 2001169786 MEDLINE
DN PubMed ID: 11267703
TI Effects of a water-soluble extract of rosemary and its purified component rosmarinic acid on xenobiotic-metabolizing enzymes in rat liver.
AU Debersac P; Vernevaut M F; Amiot M J; Suschetet M; Siess M H
CS Unite Mixte de Recherche de Toxicologie Alimentaire, Institut National de la Recherche Agronomique-Ecole Nationale Superieure de Biologie Appliquee a la Nutrition et a l'Alimentation, BP 86510, Dijon, France.. debersac@dijon.inra.fr
SO Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association, (2001 Feb) 39 (2) 109-17.
Journal code: 8207483. ISSN: 0278-6915.
CY England: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200104
ED Entered STN: 20010502
Last Updated on STN: 20010502
Entered Medline: 20010426
AB The effects of a water-soluble extract (WSE) of rosemary and its purified antioxidant rosmarinic acid (RA) on xenobiotic metabolizing enzymes (XME) were studied in rat liver after dietary administration. The modulation of phase I enzymes such as **cytochrome** P450 (CYP) **1A**, 2B, 2E1, 3A, and phase II enzymes such as glutathione S-transferase (GST), quinone reductase (QR) and UDP-glucuronosyltransferase (UGT) was evaluated by measuring enzyme activities with specific substrates. Protein levels of CYPs and rGST A1/A2, A3/A5, M1, M2 and P1 were measured using antibodies in Western blots. Caffeic acid was also studied because it results from RA biotransformation in rat after oral administration. Male SPF Wistar rats received the different compounds at 0.5% (w/w) incorporated into their diet for 2 weeks. WSE, containing RA, flavones and monoterpenes enhanced CYP 1A1, 2B1/2, 2E1 and GST (especially rGST A3/A5, M1 and M2), QR and UGT. On the contrary, no modification of XME was observed in response to RA or CA (except for a slight increase of UGT activity after CA treatment). The induction of XME by WSE could be attributed to flavones, monoterpenes or an additive effect of all components.
CT Check Tags: Male; Support, Non-U.S. Gov't
Animals
Biological Markers
Body Weight: DE, drug effects
Chromatography, High Pressure Liquid
*Cinnamates: CH, chemistry
*Cinnamates: PD, pharmacology
Cytosol: DE, drug effects
Cytosol: EN, enzymology
Diet
Flavonoids: AN, analysis
Immunoblotting
*Lamiaceae: CH, chemistry
Liver: DE, drug effects
*Liver: EN, enzymology
Microsomes, Liver: DE, drug effects
Microsomes, Liver: EN, enzymology
Organ Weight: DE, drug effects
Plant Extracts: CH, chemistry
Plant Extracts: PD, pharmacology
Rats
Rats, Wistar
Spectrophotometry, Ultraviolet

Stimulation, Chemical
Terpenes: AN, analysis
*Xenobiotics: ME, metabolism
RN 537-15-5 (rosmarinic acid)
CN 0 (Biological Markers); 0 (Cinnamates); 0 (Flavonoids); 0 (Plant Extracts); 0 (**Terpenes**); 0 (Xenobiotics)

L20 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN
RN 8000-41-7 REGISTRY
CN **Terpineol (6CI, 8CI, 9CI)** (CA INDEX NAME)
OTHER NAMES:
CN Terpineol 318
DR 8031-32-1, 11103-96-1, 37195-01-0
MF C10 H18 O
CI COM, MAN
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MSDS-OHS, NAPRALERT, PDLCOM*, PIRA, PROMT, TOXCENTER, USPAT2, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA CAplus document type: Conference; Journal; Patent; Report
RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study); BIOL (Biological study)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
1623 REFERENCES IN FILE CA (1907 TO DATE)
25 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1628 REFERENCES IN FILE CAPLUS (1907 TO DATE)
40 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=>

L22 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN
RN 221273-05-8 REGISTRY
CN **Terpeneol C (9CI)** (CA INDEX NAME)
ENTE A volatile solvent, a terpenol (Nippon Terpene Chemical Co.)
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties); USES (Uses)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=>

L16 ANSWER 36 OF 42 USPATFULL on STN

SUMM . . . toxicity. The lipid soluble steroid prodrugs may be used where membrane traversal or fusion facilitates delivery. In the case of **topical** applications of anti-inflammatories, the water insolubility of the novel lipid soluble steroid prodrugs promotes skin penetration and the lifetime of. . .

SUMM For **topical** applications, the steroid prodrugs may be used alone, may be mixed with one or more solubilizing agents or may be. . . with a delivery vehicle, and applied to the skin or mucosal membranes. Other penetrating and/or solubilizing agents useful for the **topical** application of the steroid prodrug include, for example, pyrrolidones such as 2-pyrrolidone, N-methyl-2-pyrrolidone, 1-methyl-2-pyrrolidone, 5-methyl-2-pyrrolidone, 1-ethyl-2-pyrrolidone, 2-pyrrolidone-5-carboxylic acid, N-hydroxyethylpyrrolidone, N-cyclohexylpyrrolidone,. . . and decylmethylsulfoxide; amines and derivatives such as N,N-diethyl-m-toluamide, dodecylamine, ethoxylated amine, N,N-bis(2-hydroxy-ethyl)oleylamine, dodecyl-N,N-dimethylamino acetate, sodium pryoglutaminate and N-hydroxylethalacetamide; terpenes and **terpenoids** such as a-pinenes, d-limonene, 3-carene, a-terpineol, terpinen4-ol, careol, abisabolol, carvone, pulegone, piperitone, menthone, fenchone, cyclohexene oxide, limonene oxide, pinene oxide, cyclopentene oxide, ascaridol, 7-oxabicyclo(2.2.1)heptane, 1,8-cineole, safrole, 1-carvone, **terpenoid** cyclohexanone derivatives, acyclic terpenehydrocarbon chains, hydrocarbon terpenes, cyclic ether terpenes, cardamon seed extract, monoterpene terpineol and acetyl terpineol; essential oils. . .

SUMM . . . or the lung, the vesicles are preferably less than about 200 μm in mean outside diameter. For intranasal, intrarectal or **topical** administration, the vesicles are preferably less than about 100 μm in mean outside diameter. Large vesicles, between 1 and about. . .

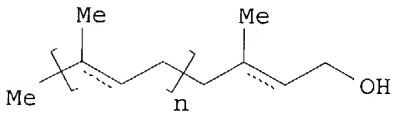
SUMM . . . phosphate, prednisolone tebutate, prednisone, triamcinolone, triamncinolone acetonide, triamcinolone diacetate, triamcinolone hexacetonide and fludrocortisone acetate; vitamins such as cyanocobalamin neinoic acid, **retinoids** and derivatives such as retinol palmitate, and α-tocopherol; peptides, such as manganese super oxide dimutase; enzymes such as alkaline phosphatase;. . .

PI US 6090800 20000718

L17 ANSWER 5 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1998:274843 CAPLUS
DN 129:32339
ED Entered STN: 13 May 1998
TI Skin preparations for acne treatment containing terpene alcohols
IN Watanabe, Ikuo; Suzuki, Jun; Arata, Hiroyuki; Hori, Kimihiko
PA Kao Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM A61K031-045
ICS A61K031-035; A61K031-075; A61K031-19; A61K031-20; A61K031-715; A61K007-40
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 62
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 10114648	A2	19980506	JP 1996-287306	19961011
PRAI JP 1996-287306		19961011		

OS MARPAT 129:32339
GI



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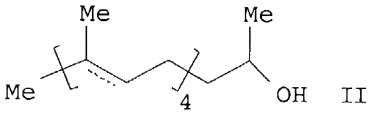
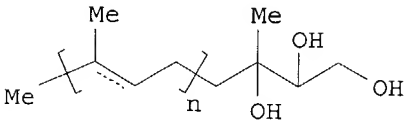
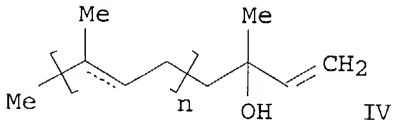


II



III



IV

AB Skin prepns. for prophylaxis and therapy of acne contain ≥1 C20-25 terpene alcs. as active ingredients. The terpene alcs. may be I (dotted line represents optional bond; n = 3-4), II, III, or IV. The prepns. may addnl. contain ≥1 selected from Bz2O2, macrolide antibiotics, tetracycline, carotenoids, **retinoids**, S, salicylic acid, resorcin, glycyrrhizinic acids, and tocopherols. Terpene alcs. show good absorbability and stability. An antiacne cream was prepared from containing geranylgeraniol, self-emulsifying glycerin monostearate, palm oil, perhydrosqualene, polyethylene glycol, EDTA, and H2O.

ST acne **topical** prepn terpene alc; geranylgeraniol skin prepn acne treatment

IT Acne
Cosmetics
(antiacne skin prepns. containing terpene alcs.)

IT Carotenes, biological studies
Retinoids
Tocopherols
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antiacne skin prepns. containing terpene alcs.)

IT Alcohols, biological studies
Alcohols, biological studies
Diterpenes

Diterpenes
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hydroxy diterpenes; antiacne skin prepns. containing terpene alcs.)

IT Sesterterpenes
Terpenes, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hydroxy; antiacne skin prepns. containing terpene alcs.)

IT Antibiotics
(macrolide; antiacne skin prepns. containing terpene alcs.)

IT Alcohols, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**terpenoid**; antiacne skin prepns. containing terpene alcs.)

IT Drug delivery systems
(**topical**; antiacne skin prepns. containing terpene alcs.)

IT 150-86-7, Phytol 505-32-8, Isophytol 1113-21-9, Geranyllinalool 22488-05-7, Geranylfarnesol 24034-73-9 74563-64-7, Phytantriol 208102-30-1
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antiacne skin prepns. containing terpene alcs.)

IT 60-54-8D, Tetracycline, derivs. 69-72-7, Salicylic acid, biological studies 94-36-0, Benzoyl peroxide, biological studies 108-46-3, 1,3-Benzenediol, biological studies 1405-86-3, Glycyrrhizinic acid 7704-34-9, Sulfur, biological studies 18323-44-9, Clindamycin
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antiacne skin prepns. containing terpene alcs.)

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L17 ANSWER 4 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:51211 CAPLUS
DN 136:107241
ED Entered STN: 18 Jan 2002
TI Methods of enhancing delivery of oil-soluble skin care actives using silicones
IN Robinson, Larry Richard; Ha, Robert Bao Kim
PA The Procter & Gamble Company, USA
SO PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K007-00
ICS A61K007-48
CC 62-4 (Essential Oils and Cosmetics)
Section cross-reference(s): 63
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002003930	A2	20020117	WO 2001-US21602	20010709
	WO 2002003930	A3	20020523		
	W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 2002022040	A1	20020221	US 2001-867235	20010529
	EP 1313427	A2	20030528	EP 2001-950988	20010709
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	BR 2001012048	A	20030617	BR 2001-12048	20010709
	JP 2004506613	T2	20040304	JP 2002-508385	20010709
PRAI	US 2000-613266	A	20000710		
	US 2001-867235	A	20010529		
	WO 2001-US21602	W	20010709		

AB Water-in-silicone emulsion for enhancement of an oil-soluble skin care active comprising a silicone elastomer is described. An oil-soluble skin care active comprises 0.01-40% by weight of the composition of the oil phase and is selected from terpene alcs., phytosterol, anti-acne actives, beta-hydroxy acids, vitamin B3 compds., **retinoids**, anti-oxidants/radical scavengers, chelators, flavonoids, anti-inflammatory agents, anti-cellulite, **topical** anesthetics, and mixts. thereof. A composition further comprises an addnl. skin care active selected from sunscreen agents, particulate materials, conditioning agents, thickening agents, water-soluble vitamins, water-dispersible vitamins, oil-dispersible vitamins, and mixts. thereof. For example, a skin cream was prepared from (by weight): Phase A, containing disodium EDTA 0.10%, Me paraben 0.10%, Pr paraben 0.10%, benzyl alc. 0.25%, green tea extract 1.00%, glycerol 6% and water up to 100%; and Phase B, containing Dow Corning 9040 11.00%, KSG-21 4.00%, cyclomethicone 12.00%, fragrance 0.20%, and farnesol 3.00%. The ingredients of each phase were mixed together sep., and the Phase A was slowly added to Phase B while mixing. The resulting product exhibits enhanced penetration of the oil-soluble skin care actives and good aesthetics.

ST silicone elastomer oil sol skin care cosmetic emulsion

IT Acne
(agents for treatment of; cosmetic emulsions containing silicone elastomers for enhancement of delivery of oil-soluble skin care actives)

IT Skin
(cellulite, agents for treatment of; cosmetic emulsions containing silicone elastomers for enhancement of delivery of oil-soluble skin care actives)
IT Cosmetics
(conditioners; cosmetic emulsions containing silicone elastomers for enhancement of delivery of oil-soluble skin care actives)
IT Anti-inflammatory agents
Antioxidants
Chelating agents
Preservatives
Radical scavengers
Sunscreens
Thickening agents
(cosmetic emulsions containing silicone elastomers for enhancement of delivery of oil-soluble skin care actives)
IT Flavonoids
Polysiloxanes, biological studies
Retinoids
Silicone rubber, biological studies
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(cosmetic emulsions containing silicone elastomers for enhancement of delivery of oil-soluble skin care actives)
IT Cosmetics
(creams; cosmetic emulsions containing silicone elastomers for enhancement of delivery of oil-soluble skin care actives)
IT Polyoxyalkylenes, biological studies
Polyoxyalkylenes, biological studies
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(di-Me, Me hydrogen polysiloxane-; cosmetic emulsions containing silicone elastomers for enhancement of delivery of oil-soluble skin care actives)
IT Polysiloxanes, biological studies
Polysiloxanes, biological studies
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(di-Me, Me hydrogen, polyoxyalkylene-; cosmetic emulsions containing silicone elastomers for enhancement of delivery of oil-soluble skin care actives)
IT Cyclosiloxanes
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(di-Me; cosmetic emulsions containing silicone elastomers for enhancement of delivery of oil-soluble skin care actives)
IT Cosmetics
(emulsions; cosmetic emulsions containing silicone elastomers for enhancement of delivery of oil-soluble skin care actives)
IT Vitamins
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(fat-soluble; cosmetic emulsions containing silicone elastomers for enhancement of delivery of oil-soluble skin care actives)
IT Tea products
(green tea exts.; cosmetic emulsions containing silicone elastomers for enhancement of delivery of oil-soluble skin care actives)
IT Carboxylic acids, biological studies
Terpenes, biological studies
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(hydroxy; cosmetic emulsions containing silicone elastomers for enhancement of delivery of oil-soluble skin care actives)
IT Anesthetics
(local; cosmetic emulsions containing silicone elastomers for enhancement of delivery of oil-soluble skin care actives)
IT Sterols
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(phytosterols; cosmetic emulsions containing silicone elastomers for enhancement of delivery of oil-soluble skin care actives)
IT Silicone rubber, biological studies
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(poly(oxyethylene)-; cosmetic emulsions containing silicone elastomers for enhancement of delivery of oil-soluble skin care actives)

IT Synthetic rubber, biological studies
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(poly(oxyethylene)-siloxane; cosmetic emulsions containing silicone elastomers for enhancement of delivery of oil-soluble skin care actives)

IT Alcohols, biological studies
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(**terpenoid**; cosmetic emulsions containing silicone elastomers for enhancement of delivery of oil-soluble skin care actives)

IT Silicone rubber, biological studies
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(vinyl group-containing; cosmetic emulsions containing silicone elastomers for enhancement of delivery of oil-soluble skin care actives)

IT Vitamins
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(water-soluble; cosmetic emulsions containing silicone elastomers for enhancement of delivery of oil-soluble skin care actives)

IT 58-95-7, Vitamin E acetate 68-26-8, Retinol 79-81-2, Retinyl palmitate 81-13-0, Dexpanthenol 97-59-6, Allantoin 98-92-0, Niacinamide 98-92-0D, Vitamin B3, compds. 100-51-6, Benzyl alcohol, biological studies 118-60-5, Octyl salicylate 139-33-3, Disodium EDTA 142-91-6, Isopropyl palmitate 4602-84-0, Farnesol 7069-42-3, Retinyl propionate 9006-65-9, Dimethicone 13463-67-7, Titanium dioxide, biological studies 23089-26-1, (-)-α-Bisabolol 43119-47-7, Tocopherol nicotinate 70356-09-1, Parsol 1789 92761-26-7, Mexoryl SX 344781-69-7, DC 9040 389622-02-0
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(cosmetic emulsions containing silicone elastomers for enhancement of delivery of oil-soluble skin care actives)

CLM What is claimed is:

1. A method to repel lice, comprising applying to a human or an animal susceptible to lice infestation an effective amount of a terpenoid or a mixture of terpenoids in an acceptable carrier for **topical** application to a human or an animal to repel lice without toxicity to the human or animal, wherein the terpenoid is selected from the group consisting of terpene-ols not including linalool, terpene-esters, unsaturated terpene, terpenoids containing an aldehyde functional group, and terpenoids containing a keytone functional group.

2. The method of claim 1, further comprising providing the terpenoid or mixture of terpenoids in an acceptable carrier in a concentration of approximately between 0.01% and 50% by weight.

3. The method of claim 2, wherein the carrier comprises a terpenoid or mixture of terpenoids in a concentration of approximately between 0.01% and 10%.

4. The method of claim 1, wherein the carrier comprises an oil containing greater than 40% terpenoid by weight.

5. The method of claim 4, wherein the oil is a perfume.

6. The method of claim 1, wherein the unsaturated terpenoid is selected from the group consisting of terpinene, pinene, limonene, myrcene, and carene.

7. The method of claim 1, wherein the terpene-ol is selected from the group consisting of perillyl alcohol, carveol, myrtenol, cis-verbenol, myrtanol, isopinocampheol, dihyrocarveol, isopulegol, **terpineol** , terpinen-4-ol, nerol, geraniol, menthol, β-citronellol, and dihydromyrcelnol.

8. The method of claim 1, wherein the terpene-ester is selected from the group consisting of carvyl acetate, carvyl propionate, menthyl lactate, and iso bornyl acetate.

9. The method of claim 1, wherein the terpenoid aldehyde is selected from the group consisting of cytral and neral.

10. The method of claim 1, wherein the terpenoid ketone is selected from the group consisting of ionone, dihydro carvone, and pullegone.

11. The method of claim 1, wherein the carrier is a material selected form the group consisting of an aqueous solution, an alcohol solution, a gel, a cream, a powder, spray, shampoo, conditioner, and hair styling mousse.

12. The method of claim 1, wherein the carrier further comprises a compound selected from the group consisting of antimicrobial preservatives, antioxidants, repellents for insects other than lice, fragrances, substances increasing binding of terpenes to hair, and substances delaying dissolution of the terpenes.

PI US 5227163 19930713|

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17. A method for killing mammalian ectoparasites and/or their eggs on a mammal, comprising applying to the mammal a composition comprising pyrethrum; benzyl alcohol; α- **terpineol**; D-limonene, wherein pyrethrum, benzyl alcohol, α- **terpineol**, and D-limonene are each present in an amount effective to kill ectoparasites; and a carrier for **topical** application, wherein the composition is substantially free from malathion, 3,8-P-methanediol, rotenone, and piperonal.

18. The method of claim 17 wherein the composition further comprises a synergist of pyrethrum.

19. The method of claim 18 wherein the synergist comprises piperonyl butoxide.

20. The method of claim 19 wherein pyrethrum is present from about 0.17% to about 0.33%, piperonyl butoxide is present from about 2% to about 4%, benzyl alcohol is present from about 2% to about 20%, α- **terpineol** is present from about 1% to about 10%, and D-limonene is present from about 1% to about 10%.

21. The method of claim 19 wherein pyrethrum is present at about 0.17%, piperonyl butoxide is present at about 2%, benzyl alcohol is present at about 4.5%, α- **terpineol** is present at about 2.5%, and D-limonene is present at about 2.5%.

22. The method of claim 17 wherein the carrier is selected from the group consisting of an alcohol solution, an alcohol dispersed system, an aqueous solution, an aqueous dispersed system and combinations thereof.

23. The method of claim 17 wherein the carrier comprises isopropanol.

24. The method of claim 17 wherein the ectoparasites are selected from the group consisting of human head lice, human body lice, human pubic lice, human mites, scabies and fleas.

25. The method of claim 17 wherein the ectoparasites comprise human head lice.

26. The method of claim 17 wherein the composition is selected from the group consisting of a cleanser and a gel.

27. A composition for killing mammalian ectoparasites and/or their eggs comprising an aromatic alcohol; one or more additional active ingredients; and a carrier for **topical** application to a mammal.

28. The composition of claim 27 wherein the aromatic alcohol comprises benzyl alcohol.

29. The composition of claim 27 wherein the aromatic alcohol comprises phenylethyl alcohol.

30. The composition of claim 27 wherein the active ingredients comprise pyrethrin.

31. The composition of claim 27 wherein the active ingredients comprise dipentene.

32. The composition of claim 27 wherein the active ingredients comprise pyrethrin and dipentene.

33. The composition of claim 27 wherein the active ingredients comprise

α- **terpineol**.

34. The composition of claim 27 wherein the active ingredients comprise α- **terpineol** and dipentene.

35. The composition of claim 27 wherein the active ingredients comprise pyrethrin, dipentene, and α- **terpineol**.

36. The composition of claim 27 further comprising a synergist.

37. The composition of claim 35 wherein the synergist comprises piperonyl butoxide.

38. The composition of claim 27 further comprising a detergent.

39. The composition of claim 38 wherein the detergent comprises laureth-4.

40. The composition of claim 27 further comprising a gel agent.

41. The composition of claim 40 wherein the gel agent comprises hydroxyethyl cellulose.

42. The composition of claim 40 wherein the gel agent comprises hydroxypropyl cellulose.

43. A method for removing mammalian ectoparasites and/or their eggs comprising applying the composition of claim 27 topically to a mammal, and cleansing the composition from the mammal, wherein the cleansing substantially removes the live and dead ectoparasites.

44. A method for killing mammalian ectoparasites and/or their eggs on a mammal infected with ectoparasites that are resistant to an active ingredient comprising, applying to a mammal infected with the ectoparasites a composition comprising i) dipentene; ii) **terpineol**; iii) an essential oil and iv) isopropanol, wherein said composition is substantially free from malathion, 3,8-P-methanediol, rotenone, and piperonal.

45. The method of claim 44 wherein said composition comprises dipentene from about 0.10% w/w to about 50.00% w/w and **terpineol** from about 0.10% w/w to about 50.00% w/w.

46. The method of claim 44 wherein said composition comprises dipentene from about 2.50% w/w to about 20.00% w/w and **terpineol** from about 2.50% w/w to about 20.00% w/w.

47. The method of claim 44 wherein said composition comprises dipentene from about 5.00% w/w to about 15.00% w/w and **terpineol** from about 5.00% w/w to about 15.00% w/w.

48. The method of claim 44 wherein the composition further comprises an active ingredient selected from the group consisting of terpinen-4-ol; 1,2,3,4-tetrahydronaphthalene; thiabendazole; ivermectin; pyriproxyfen; and aromatic alcohol.

49. A method for killing mammalian ectoparasites and/or their eggs on a mammal infected with ectoparasites that are resistant to an active ingredient comprising, applying to a mammal infected with the ectoparasites a composition comprising an aromatic alcohol; and a carrier for **topical** application, wherein the composition is substantially free from other active ingredients.

50. The method of claim 49 wherein the aromatic alcohol comprises benzyl

alcohol.

51. A composition for killing mammalian ectoparasites and/or their eggs comprising pyrethrin, piperonyl butoxide, dipentene, α-**terpineol**, benzyl alcohol, ethyl alcohol, glycerin, zinc omadine, a gel agent, laureth-4, and dimethyl isosorbide.

52. A composition for killing mammalian ectoparasites and/or their eggs comprising pyrethrin, piperonyl butoxide, dipentene, α-**terpineol**, benzyl alcohol, ethyl alcohol, propylene glycol, zinc omadine, a gel agent, laureth-4, and dimethyl isosorbide.

PI US 2003040504 A1 20030227|

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     (FILE 'HOME' ENTERED AT 17:47:47 ON 24 JUN 2004)

     FILE 'USPATFULL' ENTERED AT 17:47:58 ON 24 JUN 2004
L1           478 S TERPINEOL/CLM
L2             8 S L1 AND TOPICAL/CLM
L3             0 S TERPINEOL/AB AND TOPICAL/AB
L4            61 S TERPINEOL/AB
L5             1 S L4 AND TOPICAL/CLM

     FILE 'CAPLUS, USPATFULL' ENTERED AT 17:52:23 ON 24 JUN 2004
L6            34 FILE CAPLUS
L7            79 FILE USPATFULL
     TOTAL FOR ALL FILES
L8           113 S TERPENEOL OR TERPENIOL
L9         19481 FILE CAPLUS
L10         1610 FILE USPATFULL
     TOTAL FOR ALL FILES
L11       21091 S TERPENEOL OR TERPENIOL OR TERPENOID
L12          27 FILE CAPLUS
L13          68 FILE USPATFULL
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L14          95 S L11 AND (RETONOIC OR RETINOID)
L15           5 FILE CAPLUS
L16          42 FILE USPATFULL
     TOTAL FOR ALL FILES
L17          47 S L11 AND (RETONOIC OR RETINOID) AND TOPICAL

     FILE 'REGISTRY' ENTERED AT 17:59:13 ON 24 JUN 2004
L18           0 S TERPENIOL/CN
L19           0 S TERPENEOL/CN
L20           1 S TERPINEOL/CN
L21           0 S TERPENEOL/CN
L22           1 S TERPENEOL
L23           3 S TERPENE ALCOHOL
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     FILE 'USPATFULL, CAPLUS' ENTERED AT 18:18:09 ON 24 JUN 2004

     FILE 'CAPLUS' ENTERED AT 18:29:19 ON 24 JUN 2004
L24         9599 S TERPINEOL
L25           38 S L24 AND (TOPICAL AND SKIN)
L26           13 S L25 AND TREAT?
L27           15 S TERPINEOL AND CYTOCHROME

     FILE 'MEDLINE, SCISEARCH, EMBASE, CAPLUS' ENTERED AT 18:51:42 ON 24 JUN
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L29           0 FILE SCISEARCH
L30           0 FILE EMBASE
L31           1 FILE CAPLUS
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L32           1 S TERPINEOL AND (P450 1A)
L33           0 FILE MEDLINE
L34           0 FILE SCISEARCH
L35           0 FILE EMBASE
L36           1 FILE CAPLUS
     TOTAL FOR ALL FILES
L37           1 S TERPINEOL AND (P450 (3A) 1A)
L38         218 FILE MEDLINE
L39         293 FILE SCISEARCH
L40         452 FILE EMBASE
L41         205 FILE CAPLUS
     TOTAL FOR ALL FILES
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L42         1168 S (P450 (3A) 1A)
L43          208 FILE MEDLINE
L44          292 FILE SCISEARCH
L45          448 FILE EMBASE
L46          711 FILE CAPLUS
     TOTAL FOR ALL FILES
L47         1659 S (CYTOCHROME (5A) 1A)
L48            2 FILE MEDLINE
L49            0 FILE SCISEARCH
L50            1 FILE EMBASE
L51            2 FILE CAPLUS
     TOTAL FOR ALL FILES
L52            5 S L47 AND (TERPENOID OR TERPINEOL OR TERPEN?)

     FILE 'STNGUIDE' ENTERED AT 18:58:25 ON 24 JUN 2004
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